MGG450

MOBILE GASEOUS GENERATOR



Preliminary

SPECIFICATIONS

ENGINE

- Generac® G21.9L turbocharged, after-cooled
- Fuel Type(s): Pipeline Natural Gas, Liquid Propane, Wellhead Gas (power de-rates apply based on fuel composition, contact factory)
- Engine Power, NG Fuel Continuous hp (kW): 465 (347)
- Engine Power, NG Fuel Prime hp (kW): 558 (416)
- Operating Speed rpm: 1800
- Displacement in3 (L): 1336.42 (21.9)
- Cylinders Qty: 12
- Cylinder-specific knock sensing
- Automatic spark timing adjustment
- Bore in (mm): 5.03 (128)
- Stroke in (mm): 5.6 (142)
- Fuel Consumption, Continuous @ 100% load ft3/hr (m3/hr): 3992 (113.1)
- Fuel Consumption, Prime @ 100% load ft3/hr (m3/hr): 4563 (129.2)
- Oil Consumption qt. (L): 0.96 (0.91) every 24 hours of operation
- Radiator and oil drains plumbed to exterior
- Rubber vibration dampers isolate engine/generator from frame
- In-line engine block heater
- Disposable air filter paper element
- Air filter restriction indicator
- 60 Hz engine/generator

CAPACITIES

- Coolant (incl. engine) qt (L): 92 (87)
- Oil (incl. filter) US gal (L): 38 (144)
- 1500 hour service interval
- 125% fluid containment
- Cooling system capable of operating at 120°F (49°C) ambient
- Variable pitch fan to auto adjust for cooling and heating needs

GENERATOR

- LSA 47.2 S4
- Rise °C: 105
- PMG Generator critical grade power quality
- Class H insulation
- Electronic isochronous governing

SYSTEM OUTPUT

- 360 kW / 450 kVA prime, three phase
- 300 kW / 375 kVA continuous, three phase
- Amps, three phase, continuous A: 451 @ 480V
- Amps, three phase, prime A: 541 @ 480V
- Power Factor: 0.8

AC DISTRIBUTION

- Circuit Breaker Type / Size A: Power / 600
- Voltage Regulation: Digital, ±0.5%
- Voltages Available: Three phase: 277/480

SYSTEM CONTROLS

- Generac/Motortech Compatible with ComAp, Deep Sea (with additional DSE-123 module) and Grid
- Motortech® controller and display
 - o Backlit, 320 x 240 pixel resolution color display
 - o -40°F to 158°F (-40°C to 70°C) operating temperature range
 - o Automatic coarse voltage adjustment
- Push buttons for easy operation
 - o Manual or Auto Start
 - o Engine Start
 - o Engine Stop/Reset
 - o Alarm Mute
 - o Circuit Breaker Operation
 - o History
 - o Operator Screens
 - Main
 - Fuel Selection
 - Generator
 - Bus
 - Power Output
 - Synchronization
 - Statistics
 - Power Management
 - Analog Inputs I
 - Analog Inputs II
 - Analog Inputs III
 - Knock Detection
 - Ignition Voltage
 - Ignition Information
 - Digital Inputs/Outputs

SYSTEM CONTROLS (continued)

- Alarms
 - Warning
 - Shutdown
 - Electrical Trip
 - Engine
- Alarm list warnings / shutdowns; 250 event history log date/time stamp
 - Over speed protection: shutdown 115%
 - Oil pressure: warning 40 psi; shutdown 20 psi
 - Coolant temperature: warning 220°F (104°C); shutdown 230°F (110°C)
 - Battery voltage: over 15VDC; under 11VDC
 - Generator over voltage: warning 110%; electrical trip 111%
 - Generator under voltage: warning 87%; electrical trip 86%
 - Generator over frequency: warning 105%; electrical trip 110%
 - Generator under frequency: warning 95%; electrical trip 90%
 - Low coolant level shutdown
- Key load share features
 - o Up to 32 additional gensets
 - o Digital inter-genset communication via CAN bus
 - o Non-MGG450 controllers communication via Analog bridge
 - o Sequential set start
 - o Manual voltage/frequency adjustment
 - o Generator load demand
 - o Automatic hours run balancing
 - o Dead bus sensing
 - o Bus failure detection
 - o Direct governor and AVR control
 - Volts and frequency matching
 - o kW and kVAr load sharing

ELECTRICAL CONTROLS

- Remote start / stop contacts located next to lug box
- Lockable control box door with diagnostics window
- Lockable lug box with safety switch
 - o Trips main breaker when lug door is opened
- Output ground connection lug inside lug box
- 600A motorized main breaker with shunt trip
- Convenience receptacles with individual breakers
 - o (2) 120V 20 Amp GFCI duplex outlets (NEMA 5-20R type)
 - o Buck Transformer kit Provides 120V at GFCI outlets when in 277/480V
- Battery Type Group Number: 8D
 - o Battery Voltage, quantity per unit: 12V (2)
 - o Battery Voltage, series connection: 24V
 - o Battery Rating: 1100CCA

ENCLOSURE

- Aluminum, sound attenuated enclosure
 - o UV & fade resistant, high temperature cured, white polyester powder paint
 - o Insulated and baffled
 - o 84 dB(A) @ 23 ft. (7 m), 77°F (25°C) continuous power
 - o 80 dB(A) @ 23 ft. (7m), 77°F (25°C) continuous power w/ variable pitch fan installed
- Fully lockable enclosure
- Stainless steel hinges on doors
- Emergency stop switch located on outside of enclosure
- Central lifting point
- Multi-lingual operating/safety decals
- Document holder with operating manual including AC/DC wiring diagrams
- Integrated single point lift structure; fork pockets in frame
- 4-point standard lifting
- Push-Pull-Drag points at all 4 corners

TRAILER

- DOT approved tail, side, brake, and directional lights
 - o Recessed rear lights
- Transportation tie downs
- Safety chains with spring loaded safety hooks
- 3 in. (76.2 mm) lunette ring hitch
- (3) 7000 lb. (3175 kg) axles
- Electric brakes
- Tongue jack with footplate
- ST225/75D15D tubeless tires 6H
- Max tire pressure psi: 105
- Rear stabilizer jacks
- NATM compliant

WEIGHT & DIMENSIONS

Skid mounted

- Operating weight: 12,110 lbs. (5,493 kg)
- 204 x 72 x 101 in. (5.18 x 1.83 x 2.57 m)

Trailer mounted

- Operating weight: 15,281 lbs. (6,931 kg)
- 253 x 102 x 131 in. (6.43 x 2.59 x 3.33 m)

PRODUCT WARRANTY

1 Year / 2000 Hours - consult factory for details

CERTIFICATIONS

UL2200 and CSA22.2 rated CSA B149 compliant fuel system EPA certification pending